



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/574,949

02/28/2007

Yoshiyuki Sata

Q94347

7324

23373 7590 07/08/2010
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

ROGERS, MARTIN K

ART UNIT

PAPER NUMBER

1791

NOTIFICATION DATE

DELIVERY MODE

07/08/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

sughrue@sughrue.com
PPROCESSING@SUGHRUE.COM
USPTO@SUGHRUE.COM

Office Action Summary	Application No. 10/574,949	Applicant(s) SATA, YOSHIYUKI	
	Examiner MARTIN ROGERS	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 1, 2 and 5-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/14/2008, 7/30/2009, and 9/14/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of claims 3 and 4 in the reply filed on 6/7/2010 is acknowledged.

Claims 1, 2, and 5-10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected method and apparatus for forming the bead and bead filler of a green tire, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/7/2010.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ryo (Japanese Kokai 2001-179847 already of record) in view of Olbert et al. (USP 3853653), and Hirai et al. (WO 2002/078939) or Laurent (USP 4963207). Note that Pre-Grant Publication 2004/0013654 is an English language equivalent of the WO 2002/078939 document and is referred to by the examiner to make the rejections below.

In regards to claim 1, Ryo discloses an apparatus for making a preset bead [0001] in which the a bead core holding device in the shape of a disk 3 rotates the bead

Art Unit: 1791

core (Drawing 3: curved arrow) to wind and laminate a ribbon [0019] which is provided from an extruder ([0024]) to create a bead with a filler formed on it (Figure 4). Although Ryo does not expressly disclose that the beads are provided to radially outward positions on a carcass band on the both ends of the carcass are turned around the beads to build the tire, such is conventional in the tire-building art, as evidenced for example by Figures 1-5 of Olbert. Therefore, one of ordinary skill in the art at the time of the invention would have found it obvious to use the beads and bead fillers created by the invention of Ryo in a tire-manufacturing process carried out by the steps required by Applicant because the tire-building steps required by Applicant are conventional in the art, as disclosed by Olbert.

Although Ryo discloses that the ribbon needs to be laminated to the building surface ([0023]) and that a roller head extruder can be used to create the ribbon ([0024]), it is not clear from the disclosure of Ryo whether or not a roller is used to press the ribbon during the winding operation.

Hirai discloses that by using a roller 24 adjacent to the extrusion nozzle to press the ribbon, the ribbon can be accurately placed ([0085]). Hirai further discloses the use of a flattening roller 25 slightly downstream of the extruder and adjacent to the laying surface which provides the benefit of removing air from the laminate ([0086]). Hirai suggests that the benefits of these rollers are relevant to extrusion processes which are used to form the bead of a tire ([0006]-[0007]). Luarent discloses that the use of a roller in a strip-winding operation provides the benefit of facilitating the adherence of the wound strip (Column 5, lines 30-334). Laurent suggests to one of ordinary skill in the art

Art Unit: 1791

that this extrusion configuration is beneficial for winding operations used to form the bead of a tire (Column 6, lines 28-29). Therefore, one of ordinary skill in the art at the time of the invention would have found it obvious to use a roller during the laminating process of the previous combination for the benefit of increasing the accuracy of the laying operation or removing air from the laminate (as disclosed by Hirai) or for increasing the adherence of the laying operation (as disclosed by Laurent).

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the previous combination of Ryo (Japanese Kokai 2001-179847 already of record) in view of Olbert et al. (USP 3853653), and Hirai et al. (WO 2002/078939) or Laurent (USP 4963207) as applied to claim 3 above, and further in view of Urayama (USP 6182731). Note that Pre-Grant Publication 2004/0013654 is an English language equivalent of the WO documents and is referred to by the examiner to make the rejections below.

In regards to claim 4, Hirai further discloses a positioning device for the rollers (Figure 4: x, y, θ for roller 24 and dashed line "e" for roller 25). Laurent also discloses a controlling mechanism for the position of the roller (Figure 1: 16). The previous combination does not disclose how the core is held on the building surface, suggesting to one of ordinary skill in the art that any well known method for securing the bead core would be suitable.

Art Unit: 1791

Urayama discloses that it is known to hold a bead in position with magnets and then use actuated arms to center the bead on a holding device (Column 4, lines 25-34). Therefore, one of ordinary skill in the art at the time of the invention would have found it obvious to use magnets and a centering device to hold the bead in the desired position on the forming surface of the previous combination because this is a well known method of securing a bead in a desired position on a support (as disclosed by Urayama).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARTIN ROGERS whose telephone number is 571-270-7002. The examiner can normally be reached on Monday through Thursday, 7:30 to 5:00, and every other Friday, 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1791

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Martin Rogers/

/Richard Crispino/
Supervisory Patent Examiner, Art Unit 1791